

## THE NEEDS OF USERS

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### Introduction

This paper explains how we have drawn on available evidence on user preferences to draw up our list of what is needed to make the Major Road Network (MRN) fit for purpose.

There is well-established survey data on road user satisfaction, but through separate exercises, with very different methodologies, for the SRN and for local roads. However, road users make their journeys with very little regard to which operator has responsibility for each stretch of road. Whilst they will recognise the distinction between motorways, other dual carriageways and single carriageway main roads, they do not think in terms of Strategic Roads or LHA roads. That therefore limits the value of the separate surveys carried out so far. And of course, with the MRN a new concept, there is no specific evidence on the views of users of Major Roads as we have defined them.

The survey evidence on users of local roads, through the National Highways and Transport (NHT) exercise<sup>1</sup>, covers perceptions of all aspects of local authority transport provision, and so is rather broad-brush. From DfT, Transport Focus (see page 4 below) and former Highways Agency sources, there is much more detailed analysis available of the elements of SRN users' satisfaction, focusing on the last journey they made, accompanied now by information on their priorities for improvement. And these surveys of SRN users make good allowance for the great diversity of usage of the network: by journey type and length, by nature of user and by type of vehicle used. A further important dimension is the type of road used - 20% of the SRN is single-carriageway road, providing a different user experience from the motorways or dual carriageways that dominate.

### Research for this Study

As our Study got under way in late 2014, we commissioned a literature review from the Centre for Transport and Society at the University of the West of England ('UWE') on Network Users and Their Characteristics, and on User and Community Expectations of the Major Road Network<sup>2</sup>. We had not finalised our definition of the MRN at that stage, so UWE drew mainly on the evidence for the

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<sup>1</sup> See the [NHT website](#) to access latest reports

<sup>2</sup> The [Network Users](#) and [User and Community Expectations](#) reports were published on our Study [website](#) in February 2015

SRN (and for urban streets in respect of community expectations), but they did explore the implications of expanding the network definition.

The report on Network Users and Their Characteristics (using as the primary source DfT's 2014 report on Use of the Strategic Road Network<sup>3</sup>) highlighted two key areas relevant to user needs:

*(A) The relevance of the SRN for travel*

- Nearly half of adults use the SRN twice a week or more, with some 80% using it at least once a month
- Even 70% of London residents use the SRN at least once a month
- Those in managerial and professional occupations use the SRN most frequently, peaking in the £30k-£40k income range
- Average distance travelled on the SRN is 48 miles; but note that over 40% of the use of all purpose trunk roads was for less than 2 miles, and only 20% for more than 10 miles; while less than 5% of motorway use was for 2 miles or less, and 60% travelled more than 10 miles on the motorway.
- The proportion of a total trip which is taken on the SRN varies according to the length of the total trip: for shorter trips (up to 5 miles) around a third of the trip distance is on the SRN; predictably this increases as trip length increases, with 84% of a trip over 100 miles taking place on the SRN.

*(B) The significance of HGV traffic<sup>4</sup>*

- HGVs account for 10% of traffic on the SRN – 11% on motorways – and 4% on all 'A' roads.
- Proportionately they make much more use of the SRN than other traffic: on average nearly three quarters of an HGV's mileage on motorway and 'A' roads is on the SRN, compared with less than 50% of cars and other traffic;
- Over 70% of all HGVs and over 60% of light vans use the SRN at least twice a week

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<sup>3</sup> [Use of the Strategic Road Network](#), Department for Transport, August 2014

<sup>4</sup> We use standard DfT statistical terminology defining Heavy Goods Vehicles (HGVs) as all those over 3.5 tonnes gross vehicle weight, and Light Vans as all goods vehicles under 3.5 tonnes; the latter are sometimes referred to (including by UWE) as LGVs (**L**ight **G**oods **V**ehicles), but this must not be confused with **L**arge **G**oods **V**ehicles (LGVs) in the European Commission's categorisation, which defines LGVs as between 3.5t and 7.5t, and HGVs as all vehicles over 7.5 tonnes.

- The report shows how the (typically larger) articulated HGVs are even more strongly associated with a high proportionate use of the SRN.
- This assessment reinforces the need to give full consideration to the needs and expectations of freight vehicles in this study – the needs both of the vehicle drivers and of the companies which deploy the vehicles and whose supply requirements are being fulfilled by these journeys.

The UWE report on Users and Community Expectations noted that the ‘user experience’ is influenced at least as much by the behaviour of other road users and the driver’s own preparedness and expectations as it is by the way the road is operated. It was able to make extensive use of the regular user satisfaction survey evidence collected by the then Highways Agency<sup>5</sup>, and reported that:

- Satisfaction is higher for the SRN (particularly motorways) than it is for local roads
- Satisfaction is strongly determined by the extent of any negative factors, which undermine the valued sense of control as a driver
- Expectations are also a strong determinant on satisfaction: the more defined the expectation (particularly concerning journey time), the lower the resultant satisfaction
- Satisfaction for leisure trips is only a little higher than for business – and it is worth noting that a majority (62%) of all trips are deemed not to be time-critical
- Delay, journey purpose, and type of SRN road appear to be the most important drivers of the user’s experience and satisfaction
- HGV and bus/coach drivers feel least safe

The report also explored community expectations, but found it more challenging to make a systematic assessment of the view of neighbours of major roads; the evidence presented is about impacts on them rather than their perceptions; and largely relates to busy urban streets, where there will be most settlement along the road, rather than the MRN as a whole. Various studies show the adverse impact on house prices where there is noise nuisance from major roads; but the positive impact, given increased accessibility, has not been so well studied. UWE also noted that traffic-related problems can amplify social inequalities, as

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<sup>5</sup> See most recently, the [National Road User Satisfaction Survey 2014-5](#), along with [Area Road User Satisfaction Surveys](#) (ARUSSs) for each of the seven regions in the SRN.

people who can afford to move away from busy roads are likely to do so; this effect will distort a demographic analysis of those affected by an MRN.

### Subsequent evidence on user priorities

Since UWE reported, in January 2015, Transport Focus, in its new role representing the interests of users of the SRN, has added to the evidence base through quantitative surveys of road users' priorities for improvement. It also carried out an early qualitative assessment of road user needs and experiences<sup>6</sup>.

**Table 1: Top eight priorities by SRN user types - Transport Focus research findings**

<i>ranking of priorities for SRN users</i>	Car / van all journeys	Car / van single cway	Motorcyclist all journeys	Motorcyclist single cway	HGV all journeys	HGV single cway
A. Improved quality of road surfaces	1	1	1	1	1	1
B. Safer design and upkeep of roads	2	2	3	3	4	3
C. Better behaved drivers	3	3	2	2	5	5
D. Better management of roadworks	4	4	4	4	3	4
E. Better management of unplanned delays such as accidents of breakdowns	5	6	6	6	2	2
F. Reduced journey times	6	5	5	5	8	
G. Increased reliability of journey times	7	7	7	7	7	
H. Better information about unplanned disruptions such as accidents	8	8	8		6	6
I. Better facilities at roadside services						7
J. More provision of roadside facilities						8
K. Better lighting on the network				8		

Separate reports on priorities for improvement were published in the second half of 2015, in respect of car and van drivers and motorcyclists<sup>7</sup>, and of HGV

<sup>6</sup> <http://www.transportfocus.org.uk/research-publications/publications/road-user-needs-and-experiences-summary-report/>

<sup>7</sup> <http://www.transportfocus.org.uk/research-publications/publications/road-users-priorities-for-improvement-car-and-van-drivers-and-motorcyclists/>

drivers<sup>8</sup>. These found, that for all SRN users, in all circumstances, and with little variation by age or gender, improved quality of road surface, was by far the aspect of their journey they most wanted to see improved. The next highest priorities were similar for all groups, and when singling out use of single carriageway SRN roads (because they most resemble the bulk of LA MRN roads that our Study focuses on alongside the SRN) - although there were subtle variations in the ranking of the top eight priorities, as shown in the Table 1 above.

This has some parallels on the local roads side with the ratings on satisfaction (as opposed to priorities for improvement) in the NHT report on perceptions of local transport services: the greatest dissatisfaction was reported with condition of highways (39% satisfied), and with traffic levels and congestion (46% satisfied)<sup>9</sup>.

As noted above, there is so far little evidence of different priorities by age of driver. But the Transport Focus work, for example, reported on only three age bands (including 55+). The distinct needs of much older drivers may well become much more prominent, particularly as demographic trends mean they will form an increasingly large group: the number of drivers over 70 is set to increase 80% to 8.5 million by 2035.<sup>10</sup>

### **The components of fitness for purpose**

This evidence leads us to propose five key components of what users ought reasonably be able to expect from journeys on the Major Road Network:

1. a comfortable journey, minimising stress from, for example, a poor-quality road surface (priority A above);
2. a safe journey, with minimal risk of personal injury or damage to vehicles (priorities B, C, K above);
3. reasonable expected journey time and reliability (F and G above);
4. accurate and relevant information on routeing, hazards and delays, enabling the journey time to remain more or less predictable (D, E and H above);
5. availability of fairly priced rest and catering facilities along the road (I and J above)

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<sup>8</sup> <http://www.transportfocus.org.uk/research-publications/publications/road-users-priorities-for-improvement-heavy-goods-vehicle-drivers/>

<sup>9</sup> NHT asks about perceptions about transport services provided by local authorities, and so this is not readily comparable to the findings from NRUSS (overall satisfaction level of 89%), which asks road users about their last journey on the SRN.

<sup>10</sup> [Older Drivers Task Force Report](#), Road Safety Foundation, July 2016

We also identify an additional component:

6. safe and seamless connection and signage to the rest of the local road network,

recognising that the MRN does not exist in isolation, and users would not expect it to.

And we suggest one final component

7. value for money in using the MRN, given that the level of expectations already bears some relation to road users' feelings about what they pay for road use through fuel and vehicle excise duties – this might become more important over time as part of ensuring that the funding needed for MRN is sustainable in the longer term?

### **Specific requirements of HGV users**

These seven components apply across the piece to all users of the MRN, and greater detail in the user requirement can be developed for different user types. Given the prominence of commercial traffic in the rationale for the MRN, it is worth highlighting the particular needs of HGV operators and drivers, centred around:

- Robustness, given the physical impact of those vehicles on the infrastructure: ensuring adequate headroom at over-bridges and protection from cross-winds on exposed stretches, and maintaining across the MRN unrestricted access for vehicles up to 44 tonnes, as currently applies on the Primary Route Network.
- Reliability, given the pressures imposed by just-in-time logistics schedules: majoring on predictability of journey time, including overnight when freight flows are strong but maintenance work which closes lanes and roads is often scheduled; and
- 'Liveability', given the MRN is effectively the workplace for tightly regulated drivers: truck stop facilities need to be available by collaboration between the market and planning authorities.